

# Klip-Lok 406™

## KLIP-LOK 406™ PROFILED SHEETING AND ACCESSORIES

### SHEETING

The roof sheeting shall be double-interlocking concealed-fix Klip-Lok 406™ profile roll-formed in continuous lengths and cut to length by a pneumatic cut-off process from certified (**select from:** Galvanised 0.5mm/0.58mm **OR** ZINCALUME® 0.47mm/0.53mm **OR** ZincAL® 0.5mm/0.55mm) steel. A certificate verifying compliance shall be issued by the manufacturer, Global Roofing Solutions. The profile shall be roll-formed with three ribs at centres not exceeding 203mm and a cover width not exceeding 406mm. These will include a male and female rib with capillary action breaks. The male rib shall incorporate spurs spaced no more than 300mm apart to ensure minimum clipping areas on the side lap, and stand proud of the rib for purposes of double interlocking action with adjacent sheets. When interlocked, the minimum sheet depth shall be 41mm. Each trough shall incorporate two stiffener ribs.

### MATERIAL AND FINISH FOR KLIP-LOK 406™ ROOF SHEETING

#### Select from below:

- Galvanized steel Z275 complying with ISQ 550 (3T) (A653)
- Galvanized steel Z200 complying with ISQ 550 (3T) (A653) with a Chromadek® colour coated finish to one side with a Pebble Grey backing coat **OR** colour coated to two sides
- ZINCALUME® AZ150 coated steel G550 in mill finish
- ZINCALUME® AZ150 coated steel G550 with a Clean COLORBOND™ colour coated finish to one side with a Mountain Mist backing coat **OR** colour coated to two sides (**Not standard, by special request only**)
- ZincAL® AZ150 coated steel G550 in mill finish
- ZincAL® AZ150 coated steel G550 with a ColorPLUS® colour coated finish to one side with a Cool Grey backing coat **OR** colour coated to two sides (**Not standard, by special request only**)
- Aluminium in mill finish
- Aluminium with a Colortech G4 finish to one side with a standard colour backing coated **OR** colour coated to two sides

### FIXING KLIP-LOK 406™

The Klip-Lok 406™ sheets shall be fixed to every purlin by means of patented KL65 clips having spurs which will securely hold the sheets in position and lock-in the sidelap and centre rib. The KL65 clips shall be manufactured from Galvanized steel (aluminium KL65 clips to be used in conjunction with aluminium sheeting) and shall be fixed with the appropriate self-drilling/tapping screws to steel purlins (selection from installation manual) **OR** with ZAP no. 10x45mm Waferhead screws type 17 to timber purlins.

### KLIP-LOK 406™ FLASHINGS

Flashings specifications shall be to the Global Roofing Solutions standards and fixed to the sheeting with S10 brackets or, Sliding brackets at apex where roof sheets are 30m or longer, to obviate any direct fixing perforations. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Transverse flashing flanges shall be notched to the sheet profile where necessary. All these operations must be performed with special tools available from Global Roofing Solutions.

### SAFETY

The contractor shall exercise special care when handling long length sheeting, particularly in windy conditions. Should work be interrupted for any reason, all loose sheeting and incomplete sections must be adequately secured against possible movement by wind and gravity.

### INSTALLATION

Every precaution shall be taken to prevent damage to roof sheets during all stages of construction. Duck boards should be used when necessary to protect the sheeting from damage. Sheeting which has become deformed or damaged in any way, should be replaced. Care shall be taken to ensure that no sheeting or flashing will be cut with abrasive disc on roof surfaces in order to prevent steel particles from penetrating coated surfaces.

### HANDLING AND STORAGE

The contractor shall ensure that all materials used on site for roofing/cladding, be transported, handled and stored in accordance with the manufacturer's recommendations. Material damaged shall be rejected and replaced with undamaged material at the contractor's expense. Repair of damaged material will not generally be permitted. Rates are to include for preventing damage and protecting sheets through all stages of construction.

## **INSPECTION PRIOR TO INSTALLATION**

Before commencing installation, the contractor shall verify that the following items have been checked and accepted:

- a. The entire structure or the portion thereof to be sheeted has been correctly aligned, leveled and grouted.
- b. Purlins and girts are at the correct spacing and are within the specified tolerances.
- c. The corners of the roof are square and the wall framework is perpendicular or as specified.
- d. No protrusions such as bolt heads, splice plates, cleats, etc. appear on the face of the framework.
- e. All members to which roofing and cladding are to be fixed in aesthetically sensitive areas are true and square.
- f. Paint and any other materials that may be incompatible with the sheeting, have been painted over or, so dealt with that direct contact with the sheeting is avoided.
- g. The contact faces between the purlins or the girts and the cladding are in the same plane. Should the alignment be inadequate, the contractor shall request instructions from the engineer before proceeding with the fixing of the cladding.

## **PROTRUSION THROUGH SHEETED SURFACES**

Protrusions such as pipes, ducts and the like, shall be adequately flashed where they pass through the sheeting surface. Where ribs have to be cut away to permit penetration, additional framing is to be installed as required to support the sheeting. Depending on the position of the penetration through the roof, special attention shall be given to back flashing the sheeting to the ridge or point of water entry. In all cases, all cutting and flashings shall be so arranged that adequate provision is made for the drainage of all troughs and corrugations.

## **GUARANTEE**

The manufacturer shall comply with ISO 9001:2008 Quality Management System. Klip-Lok 406™ sheeting shall be laid in strict accordance with the manufacturer's specifications by a GRS approved contractor. A written and approved five year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer Global Roofing Solutions.

## **CLEANING OF ROOF, ETC.**

All debris, swarf, etc arising from the fixing of the cladding shall be removed from the sheeting as the fixing progresses. In addition, off-cuts of insulation, surplus fasteners, sealants, mandrels from pop rivets, off-cuts of sheeting, surplus flashing, food packaging, cartons, bottles, cans, etc shall not be left on the roof or in the gutters. Care shall be taken to ensure that no such material enters, blocks or partially impedes the flow of water into the outlets, down pipes, etc.

## **BILL DESCRIPTIONS**

Please refer to next page...

## BILL DESCRIPTIONS

Item	Description	Unit	Quantity	Rate	Total
1.	<p>Roofing/Side Cladding shall be Klip-Lok 406™ profile roll-formed in continuous lengths from certified</p> <p><b>*(Insert one of options below in this space)</b></p> <p>and fixed to steel / timber purlins/girts using KL65 clips (aluminium KL65 clips to be used in conjunction with aluminium sheeting) and class 3 fasteners, in strict accordance with manufacturer's specifications by a GRS Approved Contractor. A written and approved five year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer Global Roofing Solutions <b>(Guarantee only applicable if installed by a GRS approved contractor)</b>.                      Manufacturer: Global Roofing Solutions Tel.(011)898-2900</p> <p><b>*Options of finish to be placed above:</b></p> <p><b>(Glavanised Steel)</b></p> <ul style="list-style-type: none"> <li>Galvanized steel Z275 0.5mm (Light Industrial) complying with ISQ 550 (3T) (A653)</li> <li>Galvanized steel Z275 0.58mm (Heavy Industrial) complying with ISQ 550 (3T) (A653)</li> <li>Galvanized steel Z200 0.5mm (Light Industrial) complying with ISQ 550 (3T) (A653) with a Chromadek® finish to one side and standard backing coat, Pebble Grey to other</li> <li>Galvanized steel Z200 0.58mm (Heavy Industrial) complying with ISQ 550 (3T) (A653) with a Chromadek® finish to one side and standard backing coat, Pebble Grey to other</li> <li>Galvanized steel Z200 0.5mm (Light Industrial) complying with ISQ 550 (3T) (A653) with a Chromadek® finish to two sides</li> <li>Galvanized steel Z200 0.58mm (Heavy Industrial) complying with ISQ 550 (3T) (A653) with a Chromadek® finish to two sides</li> </ul> <p><b>(ZINCALUME®)</b></p> <ul style="list-style-type: none"> <li>ZINCALUME® AZ150 coated steel G550 0.47mm (Light Industrial) in mill finish</li> <li>ZINCALUME® AZ150 coated steel G550 0.53mm (Heavy Industrial) in mill finish</li> <li>ZINCALUME® AZ150 coated steel G550 0.47mm (Light Industrial) with a Clean COLORBOND™ finish to one side and a standard backing coat, Mountain Mist to other</li> <li>ZINCALUME® AZ150 coated steel G550 0.53mm (Heavy Industrial) with a Clean COLORBOND™ finish to one side and a standard backing coat, Mountain Mist to other</li> <li>ZINCALUME® AZ150 coated steel G550 0.47mm (Light Industrial) with a Clean COLORBOND™ finish to two sides <b>(Not standard, by special request only)</b></li> <li>ZINCALUME® AZ150 coated steel G550 0.53mm (Heavy Industrial) with a Clean COLORBOND™ finish to two sides <b>(Not standard, by special request only)</b></li> </ul> <p><b>(ZincAL®)</b></p> <ul style="list-style-type: none"> <li>ZincAL® AZ150 coated steel G550 0.5mm (Light Industrial) in mill finish</li> <li>ZincAL® AZ150 coated steel G550 0.55mm (Heavy Industrial) in mill finish</li> <li>ZincAL® AZ150 coated steel G550 0.5mm (Light Industrial) with a ColorPLUS® finish to one side and a standard backing coat, Cool Grey to other</li> <li>ZincAL® AZ150 coated steel G550 0.55mm (Heavy Industrial) with a ColorPLUS® finish to one side and a standard backing coat, Cool Grey to other</li> <li>ZincAL® AZ150 coated steel G550 0.5mm (Light Industrial) with a ColorPLUS® finish to two sides <b>(Not standard, by special request only)</b></li> </ul>	M2			

	<ul style="list-style-type: none"> <li>ZincAL® AZ150 coated steel G550 0.55mm (Heavy Industrial) with a ColorPLUS® finish to two sides <b>(Not standard, by special request only)</b></li> </ul> <p><b>(Aluminium)</b></p> <ul style="list-style-type: none"> <li>Aluminium 0,7mm Mill Finish</li> <li>Aluminium 0,8mm Mill Finish</li> <li>Aluminium 0,7mm with a Colortech G4 finish to one side with a standard colour backing coat</li> <li>Aluminium 0,8mm with a Colortech G4 finish to one side with a standard colour backing coat</li> <li>Aluminium 0,7mm with a Colortech G4 finish to two sides</li> <li>Aluminium 0,8mm with a Colortech G4 finish to two sides</li> </ul>				
2.	<p>Bullnosing to a radius of.....mm (450mm min.)  <b>OR</b>  Curving to a radius of.....mm (from 800mm to 36m)</p>	Lm M2			
3.	Over and above for rake cutting and waste.	Lm			
4.	Bend up troughs to form a dam.	Lm			
5.	Bend down troughs to form a drip.	Lm			
6.	<p>Translucent Roofing/Side Cladding shall be Modek GRP (Fibre Glass) Heavy / Standard weight with UV surface protection in Clear/Tinted in Klip-Lok 406™profile fixed in strict accordance with specification.</p> <p><b>OR</b></p> <p>Translucent Roofing/Side Cladding shall be Modek Polycarbonate 1,25mm with UV protection in Clear / Tinted in Klip-Lok 406™profile fixed in strict accordance with specification.</p>	M2			
7.	<p>Roof Insulation shall be: (This serves as a guide only)</p> <ul style="list-style-type: none"> <li>Factorylite</li> <li>Lamdaboard</li> <li>Isoboard</li> <li>Alububble</li> <li>Super Sisalation 420SA.</li> </ul>	M2			
8.	<p>Flashings shall be manufactured from</p> <p><b>*(Insert one of options below in this space)</b></p> <p>and fixed by way of S10 brackets or, Sliding brackets at apex where roof sheets are 30m or longer, all in strict accordance with manufacturer's specification using the appropriate tools available from Global Roofing Solutions.</p> <p><b>*Options of finish to be placed above:</b></p> <p><b>(Glavanised Steel)</b></p> <ul style="list-style-type: none"> <li>Galvanized steel Z275 0.58mm</li> <li>Galvanized steel Z275 0.8mm</li> <li>Galvanized steel Z200 0.58mm with a Chromadek® finish to one side and standard backing coat, Pebble Grey to other</li> <li>Galvanized steel Z200 0.8mm with a Chromadek® finish to one side and standard backing coat, Pebble Grey to other</li> <li>Galvanized steel Z200 0.58mm with a Chromadek® finish to two sides</li> <li>Galvanized steel Z200 0.8mm with a Chromadek® finish to two sides</li> </ul> <p><b>(ZINCALUME®)</b></p> <ul style="list-style-type: none"> <li>ZINCALUME® AZ150 0.53mm coated steel in mill finish</li> <li>ZINCALUME® AZ150 0.53mm coated steel with a Clean COLORBOND™ finish to one side and standard backing coat, Mountain Mist to other</li> <li>ZINCALUME® AZ150 0.53mm coated steel with a Clean COLORBOND™ finish to two sides <b>(Not standard, by special request only)</b></li> </ul> <p><b>(ZincAL®)</b></p> <ul style="list-style-type: none"> <li>ZincAL® AZ150 0.55mm coated steel in mill finish</li> <li>ZincAL® AZ150 0.55mm coated steel with a ColorPLUS® finish to one side and standard backing coat, Cool Grey to other</li> <li>ZincAL® AZ150 0.55mm coated steel with a ColorPLUS® finish to two sides <b>(Not standard, by special request only)</b></li> </ul>				

	<p><b>(Aluminium)</b></p> <ul style="list-style-type: none"> <li>• Aluminium 0,7mm Mill Finish</li> <li>• Aluminium 0,8mm Mill Finish</li> <li>• Aluminium 0,7mm with a Colortech G4 finish to one side with a standard colour backing coated</li> <li>• Aluminium 0,8mm with a Colortech G4 finish to one side with a standard colour backing coated</li> <li>• Aluminium 0,7mm with a Colortech G4 finish to two sides.</li> <li>• Aluminium 0,8mm with a Colortech G4 finish to two sides.</li> </ul>				
9.	Ridge Cap 550mm girth 3 times bent and notched on site to suit roof profile. <b>OR</b> Ridge Cap 462mm girth 1 bend in conjunction with broad flute serrated closers.	Lm			
10.	Hip Cap 550mm girth 3 times bent and notched on site to suit roof profile.	Lm			
11.	Apex Flash 550mm girth 3 times bent and notched on site to suit roof profile. <b>OR</b> Apex Flash 462mm girth 2 times bent fixed to B/F serrated closers with no direct perforations.	Lm			
12.	Headwall Flash 375mm girth 2 times bent and notched on site to suit roof profile. <b>OR</b> Headwall Flash 337mm girth 1 bent fixed to B/F serrated closers with no direct perforations.	Lm			
13.	Sidewall Flash 408mm girth 2 times bent.	Lm			
14.	Curved Sidewall Flash 408mm girth 2 times bent to a radius of .....mm.	No			
15.	Counter Flash 185mm girth 2 times bent. <b>OR</b> Curved Counter Flash 185mm girth 2 times bent to a radius of .....mm.	Lm No			
16.	Apron Flash 375mm girth 2 times bent and notched on site to suit roof profile. <b>OR</b> Apron Flash 337mm girth 1 bend fixed to B/F serrated closers with no direct perforations.	Lm			
17.	Gable Trim(Barge Flash) 580mm girth 3 times bent.	Lm			
18.	Curved Gable Trim 580mm girth 3 times bent to a radius of .....mm.	No			
19.	External Corner Trim 616mm girth 3 times bent.	Lm			
20.	Internal Corner Trim 616mm girth 3 times bent.	Lm			
21.	Cap Flash.....mm girth 2 times bent.	Lm			
22.	Drip Flash 231mm girth 3 times bent.	Lm			
23.	Back Flash (Soaker Flash).....mm girth 2 times bent.	Lm			
24.	Valley Gutter 616mm girth 4 times bent.	Lm			
25.	Hood Flash.....mm girth 3 times bent.	Lm			
26.	Door Jamb Flash 308mm girth 3 times bent.	Lm			
27.	Window Jamb Flash 308mm girth 3 times bent.	Lm			
28.	Window Sill Flash 185mm girth 2 times bent.	Lm			
29.	Pipe Flash (Dektite 40mm/50mm/100mm/150mm)	No			
	<b>Note! For special flashing requirements contact Global Roofing Solutions Tel (011) 898-2900</b>				